calm, nonviolent way that you can imagine; and people around him, and as his movement grew, were inspired by this incredible saintly manner that he exemplified and practiced.

He was a politician, yes, and he organized the farm workers. He organized boycotts. He had great victories for organizing and unionizing farm workers in California and other parts of the Nation. But it was the manner in which he did this, the calmness, the nonviolence, the sense that he could take all of these indignities and all the pressure and oppression, and respond in a positive way.

I think that is what influenced so many people, and why this honor that Mrs. Davis is sponsoring today is so important, to name a post office in the Logan Heights Community that really were his constituents.

Mr. BILBRAY. Mr. Speaker, just to close, I yield myself such time as I may consume.

Mr. Speaker, there is a lot about Cesar Chavez that a lot of people don't remember. The fact is that he was a decorated naval veteran. Also, they don't remember that Cesar Chavez was probably a good, well, 20 years ahead of his time. In fact, Cesar Chavez in 1969 led the first march on the Mexican border to protest illegal immigration. He was accompanied by Walter Mondale and Ralph Abernathy at that time to alert all to the problems that were equating with illegal immigration at that time.

In fact, in 1979, Mr. Chavez, testifying before Congress, pointed out that when farm workers strike and their strike is successful, the employers go to Mexico and have unlimited, unrestricted use of illegal immigrants to break our strikes. He also pointed out that the employers used professional smugglers to recruit and transport human contraband across the Mexican border specifically to break the union strikes of the farm workers.

I think as we recognize him, we understand that history does repeat itself. Years and years later, 20 years later, there were those raising the issue of the impact on the working class by illegal immigration, but first and foremost there was Cesar Chavez at the Mexican border saying illegal immigration is hurting us more than anybody is willing to admit and that the growers and the wealthy were benefiting from the exploitation of illegal immigration. History will show that Cesar Chavez was right and brave to stand up in 1969, and we should be doing the same today.

I yield back the balance of my time. Mrs. DAVIS of California. Mr. Speaker, before closing, I include for the RECORD this letter from the council president of San Diego, Mr. Ben Hueso, who also is celebrating and encouraging us to support this post office for Cesar Chavez in the community and recognizing what a hero he is to the people.

THE CITY OF SAN DIEGO,

San Diego, CA, October 6, 2009.

Hon. SUSAN A. DAVIS, House of Representatives, Washington, DC.

DEAR Ms. DAVIS: Cesar Chavez is a hero in my community, so I heartily endorse the proposal that the United States Postal Service facility located at 2777 Logan Avenue, San Diego, be renamed the Cesar E. Chavez Post Office in his honor. Though he passed

away in 1993, this union leader's accomplishments continue to impact the quality of life for farm workers and other laborers.

I am happy that you have sponsored H.R. 1820 to effect this change, and that the bill has 15 House cosponsors. I am not surprised that support for the redesignation of the post office is widespread. This proposal was unanimously endorsed by the Senate in August, cosponsored by Senator Barbara Boxer.

Please let me know if there is anything else I can do to support your effort to honor Cesar Chavez.

Sincerely,

BENJAMIN HUESO. Council President.

Mr. Speaker, I also wanted to mention in closing, I mentioned the fact that we have a holiday in California that young people devote to service. I think what is so really engaging about that particular holiday is that we have young people throughout the community that are so eager to carry on his legacy. They do it throughout the community in multiple ways, with the environment, educating others, educating their peers and going into schools and preschool centers to really feel that they are part of his legacy and to speak to the students.

To see the way that they really tell you so proudly of the experiences that they have had in his memory is very, very appealing; and I think it is continuing to make a difference in the lives of young people in San Diego

With that, I urge my colleagues to join me in supporting S. 748.

I yield back the balance of my time. The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from California (Mrs. DAVIS) that the House suspend the rules and pass the bill, S. 748.

The question was taken; and (twothirds being in the affirmative) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

## AMERICAN MEDICAL ISOTOPES PRODUCTION ACT OF 2009

Mr. MARKEY of Massachusetts. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 3276) to promote the production of molybdenum-99 in the United States for medical isotope production, and to condition and phase out the export of highly enriched uranium for the production of medical isotopes, as amended.

The Clerk read the title of the bill. The text of the bill is as follows:

## H.R. 3276

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

### SECTION 1. SHORT TITLE.

This Act may be cited as the "American Medical Isotopes Production Act of 2009".

### SEC. 2. FINDINGS.

Congress finds the following:

- (1) Molybdenum-99 is a critical medical isotope whose decay product technecium-99m is used in approximately two-thirds of all diagnostic medical isotope procedures in the United States, or 16 million medical procedures annually, including for the detection of cancer, heart disease, and thyroid disease, investigating the operation of the brain and kidney, imaging stress fractures, and tracking cancer stages.
- (2) Molybdenum-99 has a half-life of 66 hours, and decays at a rate of approximately one percent per hour after production. As such, molybdenum-99 cannot be stockpiled. Instead, molybdenum-99 production must be scheduled to meet the projected demand and any interruption of the supply chain from production, to processing, packaging, distribution, and use can disrupt patient care.
- (3) There are no facilities within the United States that are dedicated to the production of molybdenum-99 for medical uses. The United States must import molybdenum-99 from foreign production facilities, and is dependent upon the continued operation of these foreign facilities for millions of critical medical procedures annually.
- (4) Most reactors in the world which produce molybdenum-99 utilize highly enriched uranium, which can also be used in the construction of nuclear weapons. In January 2009, the National Academy of Sciences encouraged molybdenum-99 producers to convert from highly enriched uranium to low enriched uranium, and found that there are "no technical reasons that adequate quantities cannot be produced from LEU targets in the future" and that "a 7-10 year phaseout period would likely allow enough time for all current HEU-based producers to con-
- (5) The 51-year-old National Research Universal reactor in Canada, which is responsible for producing approximately sixty percent of United States demand for molybdenum-99 under normal conditions, was shut down unexpectedly May 14, 2009, after the discovery of a leak of radioactive water. It is unclear whether the National Research Universal reactor will be able to resume production of molybdenum-99.
- (6) The United States currently faces an acute shortage of molybdenum-99 and its decay product technetium-99m due to technical problems which have seriously interrupted operations of foreign nuclear reactors producing molybdenum-99.
- (7) As a result of the critical shortage of molybdenum-99, patient care in the United States is suffering. Medical procedures requiring technetium-99 are being rationed or delayed, and alternative treatments which are less effective, more costly, and may result in increased radiation doses to patients are being substituted in lieu of technetium-
- (8) The radioactive isotope molybdenum-99 and its decay product technetium-99m are critical to the health care of Americans, and the continued availability of these isotopes, in a reliable and affordable manner, is in the interest of the United States.
- (9) The United States should move expeditiously to ensure that an adequate and reliable supply of molybdenum-99 can be produced in the United States, without the use of highly enriched uranium.
- (10) Other important medical isotopes, including iodine-131 and xenon-133, can be produced as byproducts of the molybdenum-99 fission production process. In January 2009, the National Academy of Sciences concluded

that these important medical isotopes "will be sufficiently available if Mo-99 is available". The coproduction of medically useful isotopes such as iodine-131 and xenon-133 is an important benefit of establishing molybdenum-99 production in the United States without the use of highly enriched uranium, and these coproduced isotopes should also be available for necessary medical uses.

(11) The United States should accelerate its efforts to convert nuclear reactors worldwide away from the use of highly enriched uranium, which can be used in nuclear weapons, to low enriched uranium. Converting nuclear reactors away from the use of highly enriched uranium is a critically important element of United States efforts to prevent nuclear terrorism, and supports the goal announced in Prague by President Barack Obama on April 5, 2009, to create "a new international effort to secure all vulnerable nuclear material around the world within four years".

(12) The United States is engaged in an effort to convert civilian nuclear test and research reactors from highly enriched uranium fuel to low enriched uranium fuel through the Global Threat Reduction Initiative. As of September 2009, this program has successfully converted 17 reactors in the United States to low enriched uranium fuel, some of which are capable of producing molybdenum-99 for medical uses.

# SEC. 3. IMPROVING THE RELIABILITY OF DOMESTIC MEDICAL ISOTOPE SUPPLY.

- (a) MEDICAL ISOTOPE DEVELOPMENT PROJECTS —
- (1) IN GENERAL.—The Secretary of Energy shall establish a program to evaluate and support projects for the production in the United States, without the use of highly enriched uranium, of significant quantities of molybdenum-99 for medical uses.
- (2) CRITERIA.—Projects shall be judged against the following primary criteria:
- (A) The length of time necessary for the proposed project to begin production of molybdenum-99 for medical uses within the United States.
- (B) The capability of the proposed project to produce a significant percentage of United States demand for molybdenum-99 for medical uses
  - (C) The cost of the proposed project.
- (3) EXEMPTION.—An existing reactor fueled with highly enriched uranium shall not be disqualified from the program if the Secretary of Energy determines that—
- (A) there is no alternative nuclear reactor fuel, enriched in the isotope U-235 to less than 20 percent, that can be used in that reactor:
- (B) the reactor operator has provided assurances that, whenever an alternative nuclear reactor fuel, enriched in the isotope U-235 to less than 20 percent, can be used in that reactor, it will use that alternative in lieu of highly enriched uranium; and
- (C) the reactor operator has provided a current report on the status of its efforts to convert the reactor to an alternative nuclear reactor fuel enriched in the isotope U-235 to less than 20 percent, and an anticipated schedule for completion of conversion.
- (4) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary of Energy for carrying out the program under paragraph (1) \$163,000,000 for the period encompassing fiscal years 2010 through 2014.
- (b) DEVELOPMENT ASSISTANCE.—The Secretary of Energy shall establish a program to provide assistance for—
- (1) the development of fuels, targets, and processes for domestic molybdenum-99 production that do not use highly enriched uranium; and

- (2) commercial operations using the fuels, targets, and processes described in paragraph
- (c) URANIUM LEASE AND TAKE BACK.—The Secretary of Energy shall establish a program to make low enriched uranium available, through lease contracts, for irradiation for the production of molybdenum-99 for medical uses. The lease contracts shall provide for the Secretary to retain responsibility for the final disposition of radioactive waste created by the irradiation, processing, or purification of leased uranium. The lease contracts shall also provide for compensation in cash amounts equivalent to prevailing market rates for the sale of comparable uranium products and for compensation in cash amounts equivalent to the net present value of the cost to the Federal Government for the final disposition of such radioactive waste, provided that the discount rate used to determine the net present value of such costs shall be no greater than the average interest rate on marketable Treasury securities. The Secretary shall not barter or otherwise sell or transfer uranium in any form in exchange for services related to final disposition of the radioactive waste from such leased uranium.

#### SEC. 4. EXPORTS.

Section 134 of the Atomic Energy Act of 1954 (42 U.S.C. 2160d(b)) is amended by striking subsections b. and c. and inserting in lieu thereof the following:

"b. Effective 7 years after the date of enactment of the American Medical Isotopes Production Act of 2009, the Commission may not issue a license for the export of highly enriched uranium from the United States for the purposes of medical isotope production.

- "c. The period referred to in subsection b. may be extended for no more than four years if, no earlier than 6 years after the date of enactment of the American Medical Isotopes Production Act of 2009, the Secretary of Energy certifies to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate that—
- "(1) there is insufficient global supply of molybdenum-99 produced without the use of highly enriched uranium available to satisfy the domestic United States market; and
- "(2) the export of United States-origin highly enriched uranium for the purposes of medical isotope production is the most effective temporary means to increase the supply of molybdenum-99 to the domestic United States market.
- "d. At any time after the restriction of export licenses provided for in subsection b. becomes effective, if there is a critical shortage in the supply of molybdenum-99 available to satisfy the domestic United States medical isotope needs, the restriction of export licenses may be suspended for a period of no more than 12 months, if—
- "(1) the Secretary of Energy certifies to the Congress that the export of United States-origin highly enriched uranium for the purposes of medical isotope production is the only effective temporary means to increase the supply of molybdenum-99 necessary to meet United States medical isotope needs during that period; and
- "(2) the Congress passes a Joint Resolution approving the temporary suspension of the restriction of export licenses.
  - "e. As used in this section—
- "(1) the term 'alternative nuclear reactor fuel or target' means a nuclear reactor fuel or target which is enriched to less than 20 percent in the isotope U-235;
- "(2) the term 'highly enriched uranium' means uranium enriched to 20 percent or more in the isotope U-235;
- "(3) a fuel or target 'can be used' in a nuclear research or test reactor if—

- "(A) the fuel or target has been qualified by the Reduced Enrichment Research and Test Reactor Program of the Department of Energy; and
- "(B) use of the fuel or target will permit the large majority of ongoing and planned experiments and isotope production to be conducted in the reactor without a large percentage increase in the total cost of operating the reactor; and
- "(4) the term 'medical isotope' includes molybdenum-99, iodine-131, xenon-133, and other radioactive materials used to produce a radiopharmaceutical for diagnostic, therapeutic procedures or for research and development."

### SEC. 5. REPORT ON DISPOSITION OF EXPORTS.

Not later than 1 year after the date of the enactment of this Act, the Chairman of the Nuclear Regulatory Commission, after consulting with other relevant agencies, shall submit to the Congress a report detailing the current disposition of previous United States exports of highly enriched uranium, including—

- (1) their location;
- (2) whether they are irradiated;
- (3) whether they have been used for the purpose stated in their export license;
- (4) whether they have been used for an alternative purpose and, if so, whether such alternative purpose has been explicitly approved by the Commission:
- (5) the year of export, and reimportation, if applicable;
- (6) their current physical and chemical forms: and
- (7) whether they are being stored in a manner which adequately protects against theft and unauthorized access.

## SEC. 6. DOMESTIC MEDICAL ISOTOPE PRODUCTION.

- (a) IN GENERAL.—Chapter 10 of the Atomic Energy Act of 1954 (42 U.S.C. 2131 et seq.) is amended by adding at the end the following new section:
- "Sec. 112. Domestic Medical Isotope Production. a. The Commission may issue a license, or grant an amendment to an existing license, for the use in the United States of highly enriched uranium as a target for medical isotope production in a nuclear reactor, only if, in addition to any other requirement of this Act—
  - "(1) the Commission determines that—
- "(A) there is no alternative medical isotope production target, enriched in the isotope U-235 to less than 20 percent, that can be used in that reactor; and
- "(B) the proposed recipient of the medical isotope production target has provided assurances that, whenever an alternative medical isotope production target can be used in that reactor, it will use that alternative in lieu of highly enriched uranium; and
- "(2) the Secretary of Energy has certified that the United States Government is actively supporting the development of an alternative medical isotope production target that can be used in that reactor.
  - "b. As used in this section-
- "(1) the term 'alternative medical isotope production target' means a nuclear reactor target which is enriched to less than 20 percent of the isotope U-235;
- ''(2) a target 'can be used' in a nuclear research or test reactor if—
- "(A) the target has been qualified by the Reduced Enrichment Research and Test Reactor Program of the Department of Energy; and
- "(B) use of the target will permit the large majority of ongoing and planned experiments and isotope production to be conducted in the reactor without a large percentage increase in the total cost of operating the reactor;

- "(3) the term 'highly enriched uranium' means uranium enriched to 20 percent or more in the isotope U-235; and
- "(4) the term 'medical isotope' includes molybdenum-99, iodine-131, xenon-133, and other radioactive materials used to produce a radiopharmaceutical for diagnostic, therapeutic procedures or for research and development."
- (b) TABLE OF CONTENTS.—The table of contents for the Atomic Energy Act of 1954 is amended by inserting the following new item after the item relating to section 111:
- "Sec. 112. Domestic medical isotope production.".

### SEC. 7. ANNUAL DEPARTMENT OF ENERGY RE-PORTS.

The Secretary of Energy shall report to Congress no later than one year after the date of enactment of this Act, and annually thereafter for 5 years, on Department of Energy actions to support the production in the United States, without the use of highly enriched uranium, of molybdenum-99 for medical uses. These reports shall include the following:

- (1) For medical isotope development projects—
- (A) the names of any recipients of Department of Energy support under section 3 of this Act:
- (B) the amount of Department of Energy funding committed to each project;
- (C) the milestones expected to be reached for each project during the year for which support is provided;
- (D) how each project is expected to support the increased production of molybdenum-99 for medical uses;
- (E) the findings of the evaluation of projects under section 3(a)(2) of this Act; and (F) the ultimate use of any Department of Energy funds used to support projects under
- section 3 of this Act.

  (2) A description of actions taken in the previous year by the Secretary of Energy to ensure the safe disposition of radioactive waste from used molybdenum-99 targets.

# SEC. 8. NATIONAL ACADEMY OF SCIENCES REPORT.

The Secretary of Energy shall enter into an arrangement with the National Academy of Sciences to conduct a study of the state of molybdenum-99 production and utilization, to be provided to the Congress not later than 5 years after the date of enactment of this Act. This report shall include the following:

(1) For molybdenum-99 production—

- (A) a list of all facilities in the world producing molybdenum-99 for medical uses, including an indication of whether these facilities use highly enriched uranium in any way:
- (B) a review of international production of molybdenum-99 over the previous 5 years, including—
- (i) whether any new production was brought online;
- (ii) whether any facilities halted production unexpectedly; and
- (iii) whether any facilities used for production were decommissioned or otherwise permanently removed from service; and
- (C) an assessment of progress made in the previous 5 years toward establishing domestic production of molybdenum-99 for medical uses, including the extent to which other medical isotopes coproduced with molybdenum-99, such as iodine-131 and xenon-133, are being used for medical purposes.
- (2) An assessment of the progress made by the Department of Energy and others to eliminate all worldwide use of highly enriched uranium in reactor fuel, reactor targets, and medical isotope production facilities

## SEC. 9. DEFINITIONS.

In this Act the following definitions apply:

- (1) HIGHLY ENRICHED URANIUM.—The term "highly enriched uranium" means uranium enriched to 20 percent or greater in the isotope U-235.
- (2) LOW ENRICHED URANIUM.—The term "low enriched uranium" means uranium enriched to less than 20 percent in the isotope U-235.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Massachusetts (Mr. MARKEY) and the gentleman from Michigan (Mr. UPTON) each will control 20 minutes.

The Chair recognizes the gentleman from Massachusetts.

Mr. MARKEY of Massachusetts. I reluctantly, but I think graciously, congratulate the Speaker and his Yankees on their victory in the World Series. Twenty-seven times——

Mr. UPTON. Reserving the right to object.

Mr. MARKEY of Massachusetts. I appreciate the gentleman from Michigan's warning to me to not go overboard; but it is, without question, a historic day.

### GENERAL LEAVE

Mr. MARKEY of Massachusetts. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and include extraneous material in the RECORD.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Massachusetts?

There was no objection.

Mr. MARKEY of Massachusetts. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, the American Medical Isotopes Production Act will safeguard Americans' health care and our national security. By helping to establish production of critical medical isotopes here at home, the American Medical Isotopes Production Act will end our dependence on aging nuclear reactors outside of our borders. And by responsibly ending the export of weapons-usable, highly enriched uranium for medical isotope production, this bill will give a much-needed boost to U.S. efforts to permanently convert all reactors away from the unnecessary and dangerous use of bomb-quality material.

The bipartisan bill authorizes \$163 million for the Department of Energy to evaluate and support projects in the private sector or at universities to develop domestic sources of the most critical medical isotopes. This is necessary because we currently face a daunting supply shortage caused by technical problems at the aging foreign reactors upon which we are presently reliant. With a robust and reliable domestic production capacity, the 50,000 daily procedures which normally occur in this country, including for cancer scans and bone and brain imaging, will be secure.

The nuclear nonproliferation benefits of this bill are significant and they are timely. Shockingly, the United States still allows for nuclear weapons-grade highly enriched uranium to be exported to other countries for medical isotope production. This 1950s-era policy simply does not work in a post-9/11 world. It is dangerous, unnecessary, and it must come to an end. We simply cannot afford to have additional nuclear weapons materials in circulation when we know that terrorists would like nothing more than to steal or buy such dangerous materials.

Fortunately, according to the National Academy of Sciences, there are no technical or economic reasons why medical isotopes cannot be produced with low enriched uranium.

Currently, nuclear medicine is practiced mostly in the most developed countries, like the United States. But that is changing. And as more countries practice more nuclear medicine, more medical isotopes will need to be produced. In preparation for this, it is absolutely essential that we stop using highly enriched uranium for this purpose.

Previously, the United States spread these dangerous technologies around the world, including to some surprising places. For instance, the United States built a reactor in Iran which we fueled with weapons-grade uranium. Today, the Iranians want to use this reactor to produce medical isotopes, and negotiations are ongoing on this point. Fortunately for the world, the Iranian reactor was converted to low enriched uranium by Argentina in the 1980s. Converting reactors away from the use of highly enriched uranium, both at home and abroad, is very much in our national security interest. And that is exactly what this bill will do.

By sending a clear signal that the United States will no longer export this dangerous material, H.R. 3276 will accelerate U.S. efforts to convert reactors around the world from highly enriched to low enriched uranium. In fact, this has already begun, as the Department of Energy testified in September that all the medical isotope production reactors around the world which still use highly enriched uranium have approached the Department of Energy to ask for assistance in converting to low enriched uranium in the past few years.

This bill has the support of a wide variety of stakeholders, including the unanimous support of industry and the nuclear medical community, and nuclear nonproliferation advocates.

This is also a bipartisan bill, and I would like very much to thank my friend FRED UPTON from Michigan for working in such a bipartisan fashion. This is the way it should be done, and we thank him and we thank the other members of the minority and the majority for working towards this conclusion. You could not have a more excellent partner. Mr. WAXMAN and I and the other members of the committee want to note the incredible cooperation that did exist.

This bill will help to ensure that America has a reliable domestic source of the radio isotopes needed for lifesaving medical procedures, it will close a dangerous loophole in our Nation's nonproliferation policy by phasing out exports of highly enriched uranium, and it does so without increasing the Federal deficit, according to the Congressional Budget Office.

I urge a "yes" vote on this important bill.

I reserve the balance of my time.

□ 1515

Mr. UPTON. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, let me just start off by congratulating the gentleman from New York. I feel we will have a resolution honoring the Yankees. I would just note as a Tigers, Cubs and White Sox fan and coming from Michigan, Derek Jeter does hail from Kalamazoo, Michigan. And to his credit, he has not forgotten his roots. He is a great individual, and we appreciate his prowess on the field. I congratulate him and the Yankees as well.

Mr. Speaker, I too want to commend my colleague, ED MARKEY, and the Democratic and Republican Members on this committee for moving swiftly on an issue that is of critical importance. Problems abroad have exposed troublesome flaws here at home in nuclear medicine. Every year, 16 million medical procedures in the United States rely on the import of nuclear isotope molybdenum-99. That is 50,000 procedures every single day, and yet we import 100 percent of our supply of this isotope.

The Canadian reactor that has for decades supplied over 60 percent of molybdenum-99 is now off-line, and the nuclear reactor may never ever return to operation. Among their many medical uses, these isotopes are critical in the procedures for the detection and staging of cancer as well as heart disease. Without a proper supply of this critical isotope, tens of thousands of patients seeking diagnosis or treatment will be in jeopardy literally every single day.

So what this bill does, it will help insure a reliable supply of the most critical isotopes that are produced here in the U.S. Today, with the passage of this bill, we are a step closer to ensuring the tens of thousands of Americans who seek diagnosis and treatment every day promptly receive the care that they need. Literally, the clock is ticking, and the well-being of countless folks continues to hang in the balance.

I would note that there is a good laundry list of organizations that support this legislation, among them: American Association of Physicists in Medicine; American College of Radiology; American College of Cardiology; as well as the American Society of Nuclear Cardiology.

We don't want to deny Americans this long-practiced medical procedure which we know produces early diagnosis of a good number of diseases, and we can save countless American lives.

I would urge my colleagues on both sides to support this. Again, I congratulate the speed with which our committee held hearings, moved this through both the subcommittee and full committee. Both Mr. WAXMAN and BARTON are to be complimented, and particularly my friend, ED MARKEY, who recognized this very early, and we worked together to get it to the House floor.

I reserve the balance of my time.

Mr. MARKEY of Massachusetts. Mr. Speaker, I yield 3 minutes to the gentleman from Washington (Mr. INSLEE).

Mr. INSLEE. Mr. Speaker, I want to thank the chairman and Mr. UPTON for their leadership on this bill. I want to thank Mr. MARKEY for working with me to include language in the bill that recognizes the 17 research reactors in this country that have converted from highly enriched uranium to low enriched uranium fuel. One of these reactors is in my home State at Washington State University. This reactor can be used for medical isotope production with the use of highly enriched uranium.

I would like to clarify with Mr. MARKEY that the purpose of section 3(a)(3) which allows reactors that are in the process of converting from highly enriched uranium to low enriched uranium fuel to qualify for funds under this bill. It is my understanding that this provision should not be interpreted as giving any preferences to these reactors and that all applicants for these funds will be given full and equal consideration.

I yield to Mr. MARKEY.

Mr. MARKEY of Massachusetts. The gentleman is correct. Neither this provision nor the bill as a whole give any preference whatsoever to any technology type. The purpose of this provision is to give the Department of Energy the greatest number of options for dealing with the medical isotope crisis while also maintaining the incentive for reactors to convert to low enriched uranium fuel.

The bill includes several conditions on reactors using the exemption to ensure that their conversion to low enriched uranium fuel is successful. I fully expect the Department of Energy to give full consideration to every application for these funds, and to do so in an equitable and technology-neutral manner.

Mr. INSLEE. I would like to thank the Chair for that clarification and for working with me on one of those conditions which would make sure that we have updated status report for reactors using this exemption.

PARLIAMENTARY INQUIRY

Mr. INSLEE. Before I close, I have a parliamentary inquiry, if I may pose it.

The SPEAKER pro tempore. The gentleman may state his parliamentary inquiry.

Mr. INSLEE. Mr. Speaker, do the rules of the House prevent Members, including those in the Chair, from wearing Yankee hats on the floor of the House of Representatives?

The SPEAKER pro tempore. The wearing of a hat is in violation of the House rules.

Mr. INSLEE. I thank you, Mr. Speaker. I am sure that rule is supported by the vast majority of Americans. Thank you for your Speakership.

Mr. UPTON. Mr. Speaker, I urge my colleagues to vote for this bill, and I yield back the balance of my time.

Mr. MARKEY of Massachusetts. Mr. Speaker, I yield myself the balance of my time to close.

Mr. Speaker, I include for the RECORD the letters of support for H.R. 3276, including from the Society For Nuclear Medicine, the American College of Cardiology, the Health Physics Society and the Union of Concerned Scientists

GE HITACHI NUCLEAR ENERGY,

Wilmington, NC, July 22, 2009.

Hon. HENRY A. WAXMAN,

Chairman, Committee on Energy and Commerce, House of Representatives, Rayburn House Office Building, Washington, DC.

DEAR CONGRESSMAN WAXMAN, On behalf of GE Hitachi Nuclear Energy, I would like to offer my strong support for House passage of the American Medical Isotopes Production Act, introduced by Representative Edward Markey and Representative Fred Upton.

This bill will provide the resources necessary for the United States to move expeditiously to ensure that an adequate and reliable supply of molybdenum-99 can be produced in the United States, without the use of highly enriched uranium. Accordingly, Americans will benefit from a more robust supply of life-saving diagnostic medical isotopes like molybdenum-99.

GEH is pleased that this legislation has been introduced. It is in the best interest of the health and well being of the citizens of our great nation that this legislation is passed. We look forward to working with the government in bringing a solution to the medical isotope crisis facing America.

Thank you for your leadership on this important issue.

Sincerely.

LISA M. PRICE.

NUCLEAR THREAT INITIATIVES, Washington, DC, July 20, 2009.

Hon. EDWARD J. MARKEY, House of Representatives,

Washington, DC.

DEAR CONGRESSMAN MARKEY, You have asked for our reaction to your draft American Medical Isotopes Production Act of 2009.

I believe this legislation can and will make an important contribution to reducing commercial use of highly enriched uranium

As we know, HEU is the most attractive raw ingredient for nuclear terrorism, and its use to produce essential medical isotopes constitutes a continuing and dangerous global commerce in HEU. Means are now available to meet the world's medical isotopic needs with production technologies that do not rely on HEU, and conversion of existing facilities appears achievable in a span of seven-to-ten years.

We understand this legislation is principally intended to provide both a legal and a financial basis to develop domestic isotope production capacity based on low enriched uranium (LEU), which removes its proliferation potential. It would also provide for the elimination of U.S. HEU exports and the vulnerabilities associated with any transport of fissile material. These elements would constitute significant progress toward reducing nuclear terrorism risks.

We also welcome your efforts to support international steps to convert commercial isotope production processes to LEU. The U.S. can provide a valuable example by concentrating its own isotope production on LEU-based technologies, but other countries may need additional technical assistance and international coordination to accomplish their own conversions. NTI has been supporting programmatic work at the International Atomic Energy Agency to accelerate the production of molybdenum-99 without HEU, but a more focused effort supported by adequate technical and financial resources is needed to get the job done.

These collective steps would go far to eliminating a major hole in our web of efforts to reduce nuclear dangers. We appreciate your initiative in addressing these important matters, and your long record of attention to nonproliferation issues. This bill's purposes are consistent with NTI's effort to minimize highly enriched uranium use and commerce and will do much to advance that mission.

Sincerely,

SAM NUNN, Co-Chairman. CHARLES B. CURTIS, President.

COUNCIL ON RADIONUCLIDES
AND RADIOPHARMACEUTICALS, INC.,
Moraga, CA, September 25, 2009.

DEAR CHARMAN MARKEY AND RANKING MEMBER UPTON, CORAR has been asked to provide the Committee (1) the feasibility of LEU based Mo-99 medical isotopes and (2) CORAR's position on H.R. 3276, the American Medical Isotopes Production Act of 2009. CORAR supports H.R. 3276 and supports increasing the capacity for medical radionuclides in the U.S.

In regards to the technical feasibility of supply for U.S. patients of LEU medical isotopes, CORAR member companies produce all of the Tc-99m generators used by the U.S. nuclear medicine community for the detection of heart disease, cancer and other illnesses. These companies need a reliable supply of Mo-99 used to produce these Tc-99m generators to fulfill patients' needs. The reactors used to produce this Mo-99 are not operated by CORAR member companies. All of the five reactors currently producing Mo-99 to supply the U.S. are operated by government subsidized companies or government entities. Several groups have proposed different methods of producing LEU-based Mo-99 to increase the current capacity. Although CORAR believes some of these represent worthwhile efforts to supplement the current capacity, they have significantly different timetables to completion due to different regulatory and operational issues. Each of these groups has developed their own timetables and milestones for completion of their new method of Mo-99 production. Since these efforts to supplement the current Mo-99 capacity are being done by different groups it would be more appropriate for these individual groups to present the Committee with their own timetables. CORAR respectfully suggests the Committee contact each one of these groups to request a Gantt chart for their plans for the design, construction and completion of their project. CORAR also believes it would be in the committee's best interest to review the funding applications for Mo-99 projects submitted to DOE.

As you are aware, CORAR has expressed its concern that the mandatory 7 to 10 year halt of exports could be problematic if medical isotope production is insufficient to meet U.S. patient needs at that time. However, CORAR believes that the mandatory deadline included in H.R. 3276 is critical to ensure that the proposed medical isotope projects

will be aggressively pursued and funded. As a result CORAR would not support modifying the deadline contained in H.R. 3276. However CORAR would encourage the committee to maintain ongoing oversight of the medical isotope supply and ensure that our patient's medical isotope needs are not restricted in 2020.

Thank you for the opportunity to provide this information to the Committee. CORAR looks forward to working with you toward the enactment of the legislation.

Sincerely.

Roy W. Brown, Senior Director, Federal Affairs.

The Society of Nuclear Medicine,  $Reston,\ VA,\ July\ 10,\ 2009.$ 

Hon. Edward Markey, House of Representatives,

Washington, DC.

DEAR CONGRESSMAN MARKEY: The Society of Nuclear Medicine (SNM)—an international scientific and medical organization dedicated to raising public awareness about what molecular imaging is and how it can help provide patients with the best health care possible—appreciates your efforts to ensure a domestic supply of the important isotope Molybdenum-99 (Mo-99) within the U.S. and to curtail the use of highly-enriched uranium (HEU) in radionuclide production as a non-proliferation strategy to deter terrorism. We further appreciate your willingness to work with SNM and other stakeholders to draft legislation to responsibly address these important issues and keep patient needs in the forefront. As you know, Mo-99 decays into Technetium-99m (Tc-99m), which is used in approximately 16 million nuclear medicine procedures each year in the U.S. Recent disruptions in the supply of Mo-99 have highlighted the urgent need to ensure a domestic supply for the U.S. Your bill. the American Medical Isotope Production Act of 2009, will help patients who rely on medical imaging for the treatment and diagnosis of many common cancers by authorizing funding and providing a clear road map to create a domestic supply of Mo-99 while also allowing a responsible timeline and safeguards for the transfer of HEU to low enriched uranium (LEU); therefore, SNM endorses the American Medical Isotope Production Act of 2009.

Tc-99m is used in the detection and staging of cancer: detection of heart disease; detection of thyroid disease; study of brain and kidney function; and imaging of stress fractures. In addition to pinpointing the underlying cause of disease, physicians can actually see how a disease is affecting other functions in the body. Imaging with Tc-99m is an important part of patient care. As you may be aware, SNM, along with thousands of nuclear medicine physicians in the U.S., have, over the course of the last two years, been disturbed about supply interruptions of Mo-99 from foreign vendors and the lack of a reliable supplier of Mo-99 in the U.S. Due to these recent shutdowns in Canada, numerous nuclear medicine professionals across the country have delayed or had to cancel imaging procedures. Because Mo-99 is produced through the fission of uranium and has a half-life of 66 hours, it cannot be produced and stored for long periods of time. Unlike traditional pharmaceuticals, which are dispensed by pharmacists or sold over-thecounter, nuclear reactors produce radioactive isotopes that are processed and provided to hospitals and other nuclear medicine facilities based on demand. Any disruption to the supply chain can wreak havoc on patient access to important medical imaging procedures.

In order to ensure that patient needs are not compromised, a continuous reliable sup-

ply of medical radioisotopes is essential. Currently there are no facilities in the U.S. that are dedicated to manufacturing Mo99 for Mo-99/Tc-99m generators. The United States must develop domestic capabilities to produce Mo-99, and not rely solely on foreign suppliers. In addition, forcing a change from HEU to LEU must be done with adequate time made available for the research and development needed for the transition period. There also must be consideration of economic and environmental factors to prevent, first and foremost, putting patients at risk because of delays in production of much needed radionuclides, such as Technetium-99m (Tc-99m) which is made from Mo-99.

Your legislation will help address the needs of patients by promoting the production of Mo-99 in the United States. We thank you for your efforts and look forward to continuing to work with you on this important issue.

Should you have any further questions, please contact Hugh Cannon, Director of Health Policy and Regulatory Affairs.

Sincerely,

MICHAEL M. GRAHAM, PHD, MD, President, SNM.

This is, in my opinion, a very important piece of legislation. It makes a connection between the nuclear medicine that is practiced in this country and the nuclear proliferation issue that we are trying to solve around the world. So this really does begin to draw that line between atoms for peace and atoms for war in a way which I think we can all on a bipartisan basis come to support. History has been pointing us in this direction. This legislation is something that all Members of this Chamber can be proud of.

Mr. Speaker, I hope that all of the Members support this legislation.

Mr. INSLEE. Mr. Speaker, I request that the attached letters in support of H.R. 3276 be entered into the RECORD. They are from Covidien, Lantheus Medical Imaging, and the Health Physics Society.

COVIDIEN,

Hazelwood, MO, July 21, 2009.

Hon. Edward J. Markey, House of Representatives, Washington, DC.

DEAR CONGRESSMAN MARKEY: Your timely introduction of the American Medical Isotopes Production Act of 2009 (AMIPA) represents an impressive effort to achieve conversion to low enriched uranium (LEU) without disruption to patients who depend on critical medical radioisotopes.

Currently, the world is experiencing a molybdenum-99 (Mo-99) shortage due to the unexpected shutdown of a reactor in Canada for urgent repair. This reactor and the four others which produce the vast majority of the world's Mo-99 supply are all aging, nearing the end of their useful lives. At stake are millions of diagnostic procedures that utilize radioisotopes produced using Mo-99, especially technetium 99m (Tc-99m).

As one of the world's principal Tc 99m suppliers and given our commitment to secure a global, interdependent Mo-99 supply chain for patients worldwide, Covidien is pleased to support AMIPA and looks forward to working with you further on this legislation as it progresses through Congress.

While Covidien supports AMIPA, we do believe aspects of the bill merit additional attention during the legislative process. For example, we appreciate your acknowledgement that the 7 to 10 year timetable may not provide adequate time to fully transition to commercial-scale LEU utilization. We are

encouraged that the legislative language provides annual reports to Congress on the status of domestic development and a National Academy of Sciences report reviewing international production of Mo-99. We hope these reports will provide ample time for Congress, if necessary, to intervene if the 7-10 year deadline cannot be met. Also, while the bill is focused on Mo-99, it does not preclude the development and manufacturing of other important radioisotopes currently produced using highly enriched uranium (HEU), such as radioiodine (I-131), which are also critically important to patients.

Please accept our thanks for your work on this important challenge and the opportunity to collaborate with you.

Sincerely,

 $\begin{array}{c} \text{TIMOTHY R. WRIGHT,} \\ \textit{President.} \end{array}$ 

Lantheus Medical Imaging, North Billerica, MA, July 24, 2009.

Hon. EDWARD J. MARKEY,

Chair, Subcommittee on Energy and Environment, House Energy and Commerce Committee, Rayburn House Office Building, Washington, DC.

DEAR MR. MARKEY: We are very pleased to write in strong support of the American Medical Isotopes Production Act of 2009, of which you are a co-sponsor

which you are a co-sponsor. Based in Billerica, Massachusetts, Imaging, Lantheus Medical Inc ("Lantheus") has been a worldwide leader in diagnostic medical imaging for the past 50 years. We have over 600 employees worldwide, approximately 400 of whom work in Massachusetts and approximately two dozen of whom live in the 7th Congressional District (including the undersigned). Lantheus is the home to leading diagnostic imaging brands. including, among Technelite® (Technetium Tc99m Generator), the leading Technetium-based generator produced in the United States in both quality and number of units sold. Lantheus sells Technelite® generators to customers located in the United States and around the world.

Molybdenum-99 is the key ingredient in the Technelite® generator. Molybdenum-99 spontaneously decays into Technetium Tc-99m which is then eluted from the generator to radiolabel organ-specific imaging agents. These radiolabelled agents are then used in a variety of heart, brain, bone and other diagnostic imaging procedures.

As the largest consumer of Molybdenum-99 in the United States, we are very concerned about the fragility of the global Molvbdenum-99 supply chain. We currently rely for our Molybdenum-99 supply on nuclear reactors which produce Molybdenum-99 in Canada, South Africa, Australia, Belgium and The Netherlands. Most of these five reactors (all located outside of the United States) are aging and are increasingly subject to unscheduled shutdowns and time-consuming repairs, which limit the predictability of and accessibility to potentially millions of important medical diagnostic procedures for patients in the United States and throughout the world. We have worked closely with your office over the past several months, discussing issues affecting the medical imaging industry, and we have reviewed earlier drafts of the bill. We strongly endorse your efforts to promote the production of Molybdenum-99 in the United States for medical isotope applications.

In your discussions with your colleagues in the House and Senate about the bill, it will be important to note that the medical imaging procedures that rely on Technetium-based imaging agents contribute to improved medical care as well as cost savings for the entire medical system. It is established that better diagnostic medicine results in more

appropriate treatments, better patient outcomes, less morbidity associated with inappropriate treatments and significant cost savings for the system. As a good example of this, between approximately 20% and 40% of patients that undergo a diagnostic cardiac catheterization—an invasive and costly procedure with significant morbidity and mortality risks—are found not to have coronary artery disease. In other words, hundreds of thousands of procedures are performed each year at an annual cost to the system of potentially billions of dollars, and no underlying disease is identified. A number of these cardiac catheterization procedures could be avoided if the patients had had a nuclear cardiology imaging study using a Technetiumbased imaging agent, such as Lantheus' Cardiolite® (Kit for Preparation of Technetium Tc99m Sestamibi for Injection). A nuclear imaging study is non-invasive, and the radiation exposure to the patient is comparable to a cardiac catheterization (although the radiation exposure to health care professionals performing the procedures is substantially less for nuclear imaging). Moreover, a nuclear diagnostic study is between approximately 20% and 30% of the cost of a cardiac catheterization. Thus, cardiac medical imaging procedures that rely on Technetium produced from Molybdenum-99 can improve patient outcomes and reduce costs-core goals of the Obama Administration's proposed health care reforms.

Lantheus congratulates you and Congressman Upton on introducing the American Medical Isotopes Production Act of 2009. We would be pleased and honored to assist you in any way we can to ensure that this important and much-needed bill becomes enacted into law.

Sincerely,

MICHAEL P. DUFFY, Vice President and General Counsel.

> HEALTH PHYSICS SOCIETY, McLean, VA, July 20, 2009.

 $\begin{array}{l} \mbox{Hon. EDWARD J. Markey}, \\ \mbox{House of Representatives}, \end{array}$ 

Washington, DC.

DEAR MR. MARKEY: On behalf of the Health Physics Society, I am pleased to endorse your proposed bill entitled the "American Medical Isotopes Production Act of 2009" and to suggest two additions to the bill for your consideration that I feel will enhance the understanding of the need for the bill and the implementation of the bill's provisions.

From our previous collaborations know that the Health Physics Society is an independent nonprofit scientific organization of radiation science and radiation safety professionals. As such, we strive to assist national leaders and decision makers in providing excellence in the legislation and regulation of issues related to radiation safety. We have been pleased to support and work with your staff in the past on important legislation like the series of "Dirty Bomb Prevention Act" bills starting in 2002 that culminated in important radiological terrorism prevention and security measures in the Energy Policy Act of 2005, and the more recent "Nuclear Facility and Material Security Act of 2008" introduced last year.

Once again, we would like to support and work with your staff in developing and promoting your "American Medical Isotopes Production Act of 2009."

The Health Physics Society interest in this legislation is based on radiation safety considerations. Specifically, the lack of a reliable supply of the isotope Molybdenum-99 (Mo-99) requires substitution of diagnostic procedures that result in a higher radiation dose to the patient and the medical practitioners performing the procedure than would be received if the Mo-99 daughter,

Technicium-99m (Tc-99m), were available. In addition, the lack of a domestic supply of Mo-99 production requires the United States to ship Highly Enriched Uranium (HEU) to foreign countries with the subsequent shipment of the radioactive materials and waste products from the production of the Mo-99 back into the United States. Although we believe this is being done safely, it carries an unnecessary risk as compared to domestic production of Mo-99 using Low Enriched Uranium (LEU). One consequence, however, of using LEU in place of HEU for Mo-99 production is an increase in radioactive waste, including an increase in the production of plutonium. These waste products can be safely disposed of in properly designed disposal facilities. However, approximately 34 states do not have access to the currently authorized disposal facilities licensed by the Nuclear Regulatory Commission

In light of these radiation safety issues associated with the proposed "American Medical Isotopes Production Act of 2009", the Health Physics Society recommends two additional items be included in the bill:

1. First, we recommend the "Findings" in the bill include a finding that the lack of a reliable supply of Mo-99 results in an unnecessary increase in the radiation doses received by patients and medical practitioners.

2. Second, we recommend the bill require the Secretary of Energy be responsible for seeing that any domestic medical isotope production facility created by this bill has access to an appropriate radioactive waste disposal facility, including a federal facility if no licensed commercial facility is avail-

I hope these suggestions are helpful and I look forward to the Health Physics Society helping you in advancing this legislation. Please do not hesitate to contact me if you, or your staff, would like further information or assistance on this matter, or any other radiation safety issue.

Sincerely,

HOWARD W. DICKSON,

President.

Mr. MARKEY of Massachusetts. I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Massachusetts (Mr. Markey) that the House suspend the rules and pass the bill, H.R. 3276, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. MARKEY of Massachusetts. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX and the Chair's prior announcement, further proceedings on this motion will be postponed.

## GENERAL LEAVE

Mr. THOMPSON of Mississippi. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and insert extraneous material on H.R. 2868.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Mississippi?

There was no objection.